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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Office of the Secretary Of Defense										Date: February 2018		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: Research, Development, Test & Evaluation, Defense-Wide I BA 5: System Development & Demonstration (SDD)					PE 0605022D8Z I Defense Exportability Program							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	11.382	2.853	3.162	1.489	-	1.489	3.698	3.465	2.939	2.993	Continuing	Continuing
013: Defense Exportability Features (DEF) Program	11.382	2.853	3.162	1.489	-	1.489	3.698	3.465	2.939	2.993	Continuing	Continuing

**Note**

The FY 2019 funding request was reduced by \$2.486 million to account for the availability of PY execution balances. This reduction was based on FY 2017 expenditures as of September 30, 2017, and accounts for a 22% reduction in the CWP FY 2019 proposed budget.

**A. Mission Description and Budget Item Justification**

The Defense Exportability Features (DEF) Pilot Program is a result of a USD (AT&L) sponsored legislative proposal for authorities to better prepare warfighting systems for non-US use. This program funds activities to support identification of major defense acquisition programs for possible export, and the planning for design and incorporation of exportability features during the research and development phases of these programs. Features include, but are not limited to, technology and engineering design activities such as capability differentials, anti-tamper, system assurance, and software assurance. Activities include the development of program protection strategies for the program; the design and incorporation of exportability features into the system; implementation of exportability requirements into contracts; and other research, development, test, and evaluation activities.

Defense exportability features play a critically important role in United States Government/DoD efforts to build partnership capacity. Funds support building joint and coalition environments by enabling the export of DoD systems to a wide range of partner nations, resulting in improved security and interoperability. In addition to the operational benefits, by providing these resources up front, the United States and partner nations will save significant resources by more efficiently designing and producing exportable U.S. systems.

A number of designated systems participating in the DEF Pilot Program in FY18 will continue defining and implementing DEF 'best practices' related to designing and developing technology protection in the areas of program management, system engineering, and technology protection measures in the DoD acquisition process. Failure to consider export variant designs early in the acquisition process results in increased costs, delayed delivery, and higher risk of sensitive technology compromise due to ad-hoc sales later in production. Early development of export variants, including systems design approaches to integrate exportable anti-tamper protection and differential capability requirements to lower production costs, makes it possible to improve quality and timely deliveries to allies and friends, and may enhance US industry share of the global marketplace.

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B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	2.920	3.162	2.955	-	2.955
Current President's Budget	2.853	3.162	1.489	-	1.489
Total Adjustments	-0.067	0.000	-1.466	-	-1.466
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.064	-			
• FFRDC Transfer	-0.003	-	-1.466	-	-1.466

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Office of the Secretary Of Defense										Date: February 2018		
Appropriation/Budget Activity 0400 / 5					R-1 Program Element (Number/Name) PE 0605022D8Z / Defense Exportability Program				Project (Number/Name) 013 / Defense Exportability Features (DEF) Program			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
013: Defense Exportability Features (DEF) Program	11.382	2.853	3.162	1.489	-	1.489	3.698	3.465	2.939	2.993	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

The Defense Exportability Features (DEF) Pilot Program is a result of a USD (AT&L) sponsored legislative proposal for authorities to better prepare warfighting systems for non-US use. This program funds activities to support identification of major defense acquisition programs for possible export, and the planning for design and incorporation of exportability features during the research and development phases of these programs. Features include, but are not limited to, technology and engineering design activities such as capability differentials, anti-tamper, system assurance, and software assurance. Activities include the development of program protection strategies for the program; the design and incorporation of exportability features into the system; implementation of exportability requirements into contracts; and other research, development, test, and evaluation activities.

Defense exportability features play a critically important role in United States Government/DoD efforts to build partnership capacity. Funds support building joint and coalition environments by enabling the export of DoD systems to a wide range of partner nations, resulting in improved security and interoperability. In addition to the operational benefits, by providing these resources up front, the United States and partner nations will save significant resources by more efficiently designing and producing exportable U.S. systems.

A number of designated systems participating in the DEF Pilot Program in FY18 will continue defining and implementing DEF 'best practices' related to designing and developing technology protection in the areas of program management, system engineering, and technology protection measures in the DoD acquisition process. Failure to consider export variant designs early in the acquisition process results in increased costs, delayed delivery, and higher risk of sensitive technology compromise due to ad-hoc sales later in production. Early development of export variants, including systems design approaches to integrate exportable anti-tamper protection and differential capability requirements to lower production costs, makes it possible to improve quality and timely deliveries to allies and friends, and may enhance US industry share of the global marketplace.

## B. Accomplishments/Planned Programs (\$ in Millions)

	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Title:</b> Defense Exportability Features (DEF) Program	2.853	3.162	1.489
<b>FY 2018 Plans:</b>			
In FY 2018, the pilot program is anticipating initiating or continuing contracts for DEF feasibility studies or DEF design activities on the following previously selected systems (plus any new DEF Pilot Program designated systems selected by OSD for FY 2018 - 2019):			
- Three-Dimensional Expeditionary Long-Range Radar (US Air Force)			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Office of the Secretary Of Defense			<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 0400 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0605022D8Z / <i>Defense Exportability Program</i>		<b>Project (Number/Name)</b> 013 / <i>Defense Exportability Features (DEF) Program</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<ul style="list-style-type: none"> <li>- Joint Air to Ground Missile (US Army)</li> <li>- Air and Missile Defense Radar (US Navy)</li> <li>- Indirect Fires Protection Capability (US Army)</li> <li>- Future Vertical Lift (US Army)</li> <li>- Miniature Air Launched Decoy (US Air Force)</li> <li>- Land Mine Removal System (US Army)</li> <li>- Lower Tier Air Missile Defense (US Army)</li> </ul> <ul style="list-style-type: none"> <li>- Review of major defense acquisition programs for exportability as part of the major milestone review process.</li> <li>- Identify and select new pilot program candidates from Service Acquisition Executive nominations.</li> <li>- Identify Service leads and subject matter experts, to provide support to programs, prior to Milestone C, to develop plans for exportability features.</li> <li>- Manage, resource, and track the completion of the contractor exportability feasibility studies and design activities.</li> <li>- Oversee drafting of DEF Lessons Learned, Interim Progress Review briefings, and Final Reports from DEF studies conducted in FY 2018.</li> <li>- Draft and submit the annual report to Congress on the program.</li> </ul> <p><b>FY 2019 Plans:</b> The focus for FY 2019 for the DEF pilot program will be to execute feasibility studies from newly selected DEF Pilot Programs that have yet to receive DEF funding, and to conduct follow-on DEF design studies on designated DEF pilot programs. As with the FY 2018 programs, FY 2018 feasibility studies will define the required actions for incorporating DEF into programs, begin DEF designs on select designated programs, and assess the potential costs of those actions. OUSD (AT&amp;L) will continue to engage with program offices through the Military Department DEF POCs, and serve as a liaison among the program offices, the Military Departments, and other defense agencies to facilitate the feasibility studies. OUSD (AT&amp;L)/IC will ensure the DEF feasibility studies are addressed in program Acquisition Strategies and Program Protection Plans (PPP). For Post-MS B platforms, when there is already a contract in place, OUSD (AT&amp;L) will work with the program managers and contracting officers to implement the necessary contractual modifications to ensure that the feasibility studies were executed.</p> <p><b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> FY 2018 to FY 2019 decrease is driven by directed reductions to account for the availability of PY execution balances.</p>					
<b>Accomplishments/Planned Programs Subtotals</b>			2.853	3.162	1.489
<b>C. Other Program Funding Summary (\$ in Millions)</b>					
N/A					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Office of the Secretary Of Defense		<b>Date:</b> February 2018
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<b>C. Other Program Funding Summary (\$ in Millions)</b>		
<b><u>Remarks</u></b>		
<b><u>D. Acquisition Strategy</u></b> N/A		
<b><u>E. Performance Metrics</u></b> N/A		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Office of the Secretary Of Defense												<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 0400 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0605022D8Z / Defense Exportability Program				<b>Project (Number/Name)</b> 013 / Defense Exportability Features (DEF) Program				

  

Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DEF	TBD	Various : Various	11.382	2.853		3.162		1.489		0.000		1.489	Continuing	Continuing	-
<b>Subtotal</b>			11.382	2.853		3.162		1.489		0.000		1.489	Continuing	Continuing	N/A

  

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	11.382	2.853	3.162	1.489	0.000	1.489	Continuing	Continuing	N/A

  

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2019 Office of the Secretary Of Defense			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 0400 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605022D8Z / <i>Defense Exportability Program</i>	<b>Project (Number/Name)</b> 013 / <i>Defense Exportability Features (DEF) Program</i>	

<u>PROJECT PLAN</u>	10/1/2016	10/1/2017	10/1/2018	10/1/2019	10/1/2020	10/1/2021	10/1/2022
FY 2017 Project Execution							
FY 2018 Project Execution							
FY 2019 Project Execution							
FY 2020 Project Execution							
FY 2021 Project Execution							
FY 2022 Project Execution							

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Office of the Secretary Of Defense			<b>Date:</b> February 2018
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Defense Exportability Features (DEF)</i></b>				
FY 2017	1	2017	4	2019
FY 2018	1	2018	4	2020
FY 2019	1	2019	4	2021
FY 2020	1	2020	4	2022
FY 2021	1	2021	4	2023

**Note**

N/A